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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/833,815 | 04/13/2001 | Shinobu Hasegawa | Q64020 | 5723 |

7590 05/29/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

JIMENEZ, MARC QUEMUEL

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| | 14 |

3726

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

*filled and
None*

20010041654

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/833,815 | HASEGAWA ET AL. |
| Examiner | Art Unit | |
| Marc Jimenez | 3726 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 April 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 and 7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
- 4) Interview Summary (PTO-413) Paper No(s). _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1-5 and 7** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims recite that the sleeve made from an elastomer material is an “unshrinkable sleeve”. This limitation is non enabling because typical elastomer materials will shrink when heated or when heat and pressure is applied. Furthermore, when an elastomer is melted, the elastomer will shrink due to the molecular make up of elastomers. The specification describes materials that are used for the sleeve, for example, polyamide, polyamide elastomer, fluorine containing polymer compound, fluorine-containing elastomer, such as PFA, PTFE, or ETFE. These types of materials will shrink when melted.

The claims require that the unshrinkable sleeve be “heat welded” onto the surface of the roller. It is unclear what “heat welded” encompasses. Applicant has stated that the unshrinkable sleeve is heat welded directly onto the surface of the core roller and states that the “directly” limitation precludes an additional layer between the core roller and the sleeve. However, the

specification does not clearly describe what “heat welding” encompasses. In the prior art, heat welding comprises the melting of an elastomer sleeve material so that the elastomer sleeve material is attached to the core (see Shoffner 3,749,621). If applicant’s heat welding is the same as the prior art heat welding, wherein the elastomer material is melted, it is unclear how the material could be “unshrinkable” because when an elastomer material is melted by welding, it shrinks at the molecular level.

Applicant is requested to submit an affidavit showing how the elastomeric sleeve material is not shrinkable when heated or melted.

If applicant amends the claims such that “unshrinkable” is removed from the claims, it is noted that Shoffner would potentially be applied in a rejection because Shoffner teaches heat welding by melt bonding a sleeve made of FEP (which is a type of “fluorine containing polymer compound” that applicant also uses for the sleeve as described in applicant’s specification at page 4, last paragraph).

In response to this office action, applicant is requested to clarify the following issues:

- Does “heat welding” mean that the sleeve material is melted? On page 7, lines 6-8 of applicant’s specification, the core roller is heated at 162 degrees C for 60 minutes. Does this heating of the core roller melt the sleeve onto the core?
- Does heat “unshrinkable” mean that the sleeve will not shrink when melted or heated? If this is the case, an affidavit is required showing which elastomeric materials will not shrink when melted or heated.

Contact Information

3. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to CustomerService3700@uspto.gov.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is **703-306-5965**. The examiner can normally be reached on **Monday-Friday, between 5:30 am- 2:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Art Unit: 3726

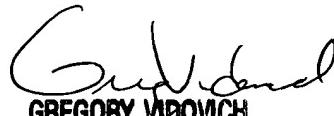
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| Assignment Branch | (703) 308-9723 |
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| Drawing Corrections/Draftsman | (703) 305-8404/8335 |
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If the information desired is not provided above, or a number has been changed, please call the general information help line below.

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MJ

May 22, 2003



GREGORY VODOVICH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700